

What is claimed is:

1. An authentication time-variant code which can be read out by a machine, said time-variant code being one-dimensional and two-dimensional code,

wherein shape, position, tone, brightness of code pattern or combination of the shape, position, tone, brightness of the code pattern vary according to time and wherein a predetermined information is contained in code pattern variation.

2. The authentication time-variant code of claim 1, wherein a limited numbers of static patterns vary randomly.

3. The authentication time-variant code of claim 1, wherein static patterns vary with order as time goes.

4. The authentication time-variant code of claim 1, using change of time-variation timing when static patterns vary.

5. A system for displaying authentication time-variant code and reading out the code, comprising:

a handheld terminal having a displaying apparatus;

a reader for reading out time-variant code displayed in the handheld terminal, said code being generated in said server.

6. The system of claim 5, wherein said server couples to application of conventional barcode system.
7. The system of claim 5, wherein said handheld terminal comprises communication module and information processing module.
8. The system of claim 5, further comprising graphic user interface environment.
9. The system of claim 5, wherein said reader comprises a display unit for visually displaying processing state of functions and visually displaying said authentication code;
a control unit for controlling functions of receiving the authentication code, temporarily storing the authentication code and displaying the authentication code;
a memory for storing data relating to the authentication code;
an input unit for inputting user's commands to a reading unit;
a power unit for supplying electric power necessary for operating the reading unit;
a communication unit for transmitting the read out information of the reading unit and receiving authenticating signal;

a reading unit having a sensor for recognizing the code or a scanner and a converter for converting analog recognized signal from the sensor or scanner into digital signal.

10. The system of claim 9, wherein said reading unit comprising a reading unit for exclusive use of time-variant code.

11. The system of claim 9, further comprising a connection means for inputting information corresponding to the time-variant code, in addition to said reading unit.

12. A method for reading authentication time-variant code, comprising:

- a step of picturing static pattern of the time-variant code using a camera or an optical sensor;
- a step of storing the pictured static code in memory;
- a decoding-condition determining step of determining whether the number of the stored static codes satisfies a predetermined condition for decoding said time-variant code;
- a static code decoding step of decoding the stored static code if the number of the static codes satisfies the predetermined condition for decoding said time-variant code;
- a time-variant code decoding step of decoding the time-variant code after said static code decoding step; and

a time-variant code reading step of reading the decoded time-variant code.

13. A method for reading authentication time-variant code, comprising:

 a static code picturing step of picturing the static pattern of the time-variant code using a camera or an optical sensor;

 a static code decoding step of decoding the pictured static code;

 a decoded information storing step of storing the decoded information of the static code in memory;

 a decoding condition determining step of determining whether the decoding information of the stored static code satisfies a predetermined condition for decoding the time-variant code;

 a time-variant code decoding step of decoding the time-variant code if the number of the decoded information of the static codes satisfies the predetermined condition for decoding said time-variant code;

 a time-variant code reading step of reading the decoded time-variant code.

14. A method for displaying an authentication time-variant code and reading the code, comprising:

 a step of determining a plurality of static codes, a step of determining the type of the time-variant code and a step of codifying the time-variant code, in order to generate the time-variant code in a server; and

a step of transmitting the static code information of the codified time-variant code and the type of time-variant pattern.

15. A method for displaying an authentication time-variant code and reading the code, comprising:

- a step of receiving source information;
- a step of determining a plurality of static codes;
- a step of determining a type of the time-variant pattern; and
- a step of codifying the time-variant code.

16. A method for displaying an authentication time-variant code and reading the code, comprising:

- a decoding step of decoding code image receiving from a server;
- a source information extracting step of determining time-variant information through the decoded time-variant code; and
- a re-sending step of server's re-sending the source information of the time-variant code.

17. The method of claim 16, wherein if independent apparatus has image analyzing module, the independent apparatus carries decoding step and source information extracting step without transmitting the image of the time-variant code to the server